



# Semantic MediaWiki

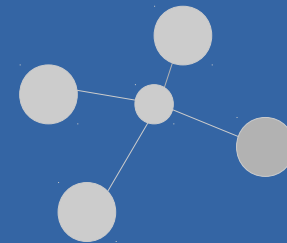
## Current Status and New Features in 3.0.0

Karsten Hoffmeyer, December 13, 2018



### SMWCon Fall 2018

December 12 to 14, Regensburg



# Semantic MediaWiki

- Current Status
- New Features
- How you can contribute?!

Current Status of [semantic-mediawiki.org](http://semantic-mediawiki.org)

- Evolution of documentation

- Extending and improving documentation

- Ongoing effort by a few community members
    - Getting the missing documentation in  
[https://www.semantic-mediawiki.org/wiki/semantic-mediawiki.org:Documentation\\_status](https://www.semantic-mediawiki.org/wiki/semantic-mediawiki.org:Documentation_status)
    - Less overwhelming in size and information
    - More annotations, queries and templates for easier display and exploration
    - Integration with the “Translate” extension for general information pages

- Revolution of the wiki's skin
  - Radical change of look and feel
    - Now using Chameleon
    - Modern yet conservative
    - Adapted color scheme
    - Better mobile support
    - Better user guidance
    - Still room for improvement

## Current Status of Semantic MediaWiki

### → Releases since SMWCon Fall 2017

- SMW 2.5.x – 4 releases

2.5.0, 2.5.1, 2.5.2, 2.5.3, 2.5.4, 2.5.5, 2.5.6, 2.5.7, 2.5.8

- SMW 3.0.x – 1 release

3.0.0

# Semantic MediaWiki

## Current Status

### GitHub Commits

July 2016 –  
June 2017



July 2017 –  
June 2018



Sources:

- <https://github.com/SemanticMediaWiki/SemanticMediaWiki>
- `git log 86a87217f7178b82bda02f9c9348a0d0d88ad7e4...080c188c795a4cfccf87b97c497825c768eccb69 --pretty=oneline | wc -l`
- `git shortlog -sn 86a87217f7178b82bda02f9c9348a0d0d88ad7e4...080c188c795a4cfccf87b97c497825c768eccb69`



# Semantic MediaWiki

## Current Status

### Integration and Unit Tests, Assertions

March 2017 –  
SMW 2.5.0

**4,660**

tests

**14,917**

assertions

October 2018 –  
SMW 3.0.0

**6,808**

tests

**17,978**

assertions

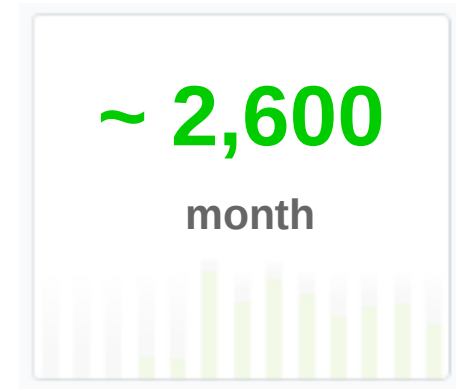
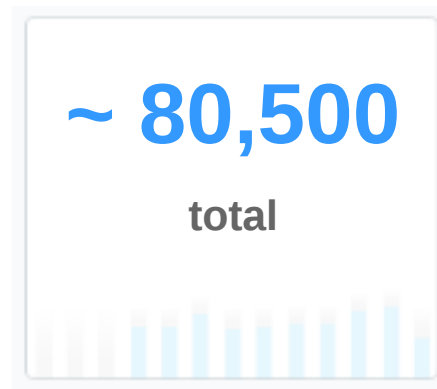
Source: <https://travis-ci.org/SemanticMediaWiki/SemanticMediaWiki>

# Semantic MediaWiki

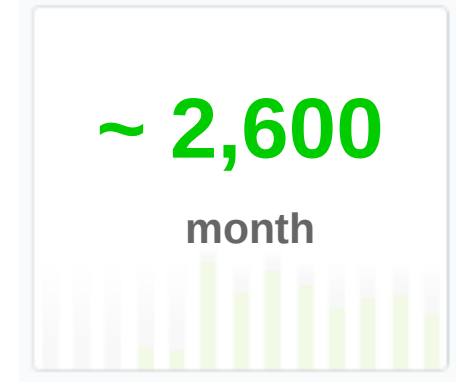
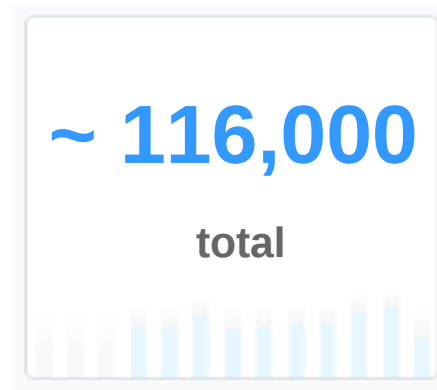
## Current Status

### Average monthly installs

September 2017



December 2018

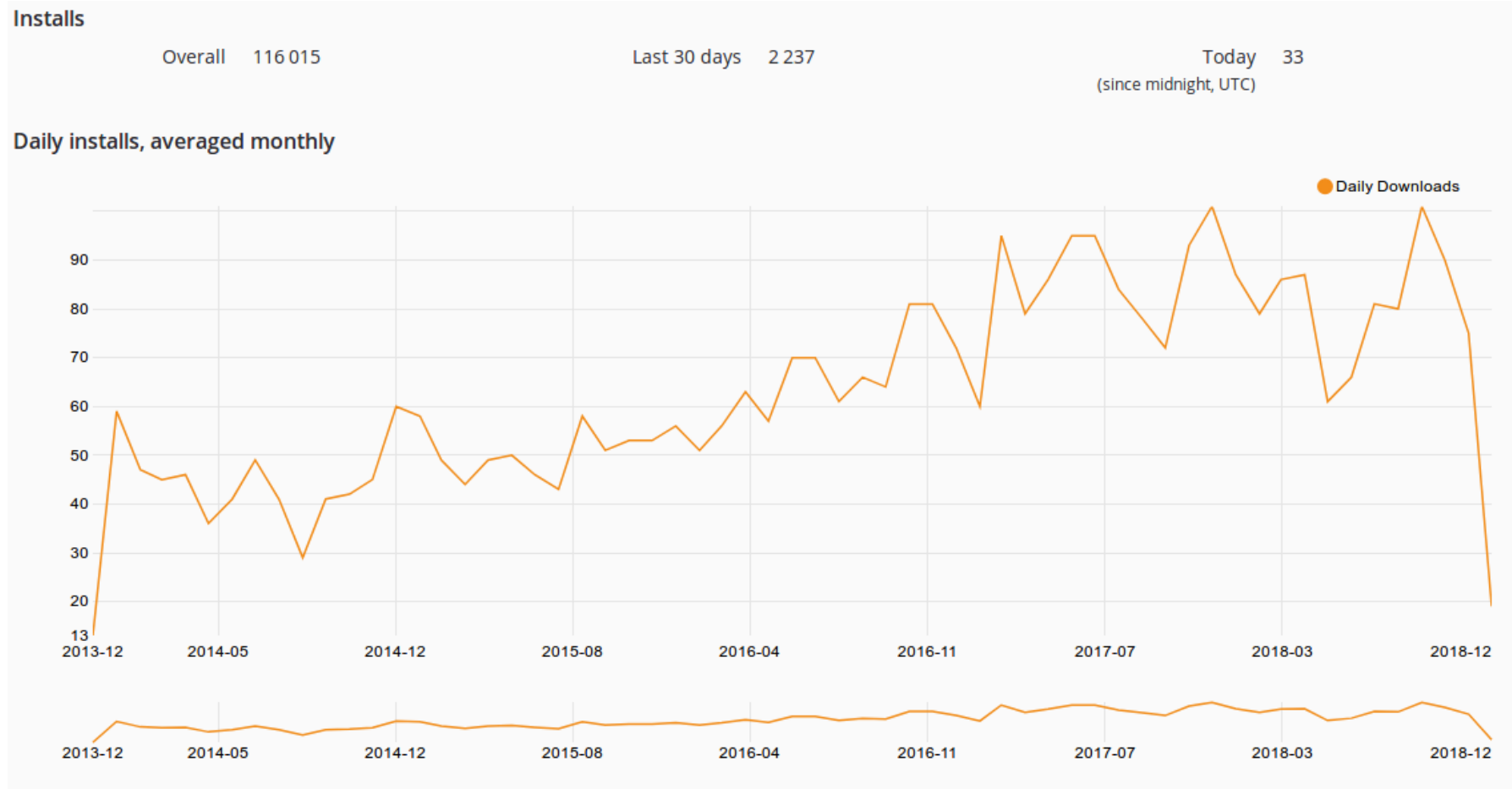


Source: <https://packagist.org/packages/mediawiki/semantic-media-wiki/stats>

# Semantic MediaWiki

## Current Status

### Daily installs, averaged monthly



Source: <https://packagist.org/packages/mediawiki/semantic-media-wiki/stats>

# Semantic MediaWiki

Semantic MediaWiki 3.0.0

Released on October 12, 2018

# Semantic MediaWiki

Semantic MediaWiki 3.0.0

- Some Breaking Changes

Internal code as well as user facing semantic syntax.

- Many New Features

Hold your horses. Slides to come.

# Semantic MediaWiki

Semantic MediaWiki 3.0.0

## GitHub Commits

March 2017 –  
October 2018

SMW 2.5.0 –  
SMW 3.0.0



Sources:

- <https://github.com/SemanticMediaWiki/SemanticMediaWiki>
- `git log dbbf3d1e465f95c912da2ef421db729ad90f993e...abdec882fc57dd5b54cab15e8f419056164ee66a --pretty=oneline | wc -l`
- `git shortlog -sn dbbf3d1e465f95c912da2ef421db729ad90f993e...abdec882fc57dd5b54cab15e8f419056164ee66a`

### Tested Compatibility

- MediaWiki 1.27.x to MediaWiki 1.31.x
- PHP 5.6.x to PHP 7.2.x
- Several relational stores (MySQL/MariaDB 5+, PostgreSQL, SQLite)
- Several RDF stores (Blazegraph 1.5.2+, Jena, Virtuoso, etc.)
- Elasticsearch store 5.6+

# Semantic MediaWiki

## Semantic MediaWiki 3.0.0

### Test matrix (voting)

✓ Pull Request #3518 Release version 3.0.0

Commit 0d91a0b

#3518: Release version 3.0.0

Branch master

Karsten Hoffmeyer

#11133 passed















Ran for 37 min 47 sec

Total time 2 hrs 39 min 13 sec

2 months ago

Build jobs

View config

✓ # 11133.1	 </> PHP: 7.1	 DB=mysql; MW=REL1_29; PHPUNIT=5.7.*	🕒 9 min 44 sec
✓ # 11133.2	 </> PHP: 5.6	 DB=mysql; MW=REL1_28; FUSEKI=2.4.0; PHPUNIT=5.7.*	🕒 14 min 32 sec
✓ # 11133.3	 </> PHP: 5.6	 DB=mysql; MW=REL1_27; VIRTUOSO=6.1; PHPUNIT=5.7.*	🕒 13 min 23 sec
✓ # 11133.4	 </> PHP: 5.6	 DB=mysql; MW=REL1_27; SESAME=2.8.7; PHPUNIT=5.7.*	🕒 13 min 15 sec
✓ # 11133.5	 </> PHP: 5.6	 DB=sqlite; MW=REL1_27; SITEMLANG=ja; PHPUNIT=5.7.*	🕒 16 min 58 sec
✓ # 11133.6	 </> PHP: 7.2	 DB=postgres; MW=REL1_31; PHPUNIT=6.5.*	🕒 11 min 3 sec
✓ # 11133.7	 </> PHP: 5.6	 DB=mysql; MW=REL1_27; BLAZEGRAPH=1.5.2	🕒 17 min 29 sec

Sources: <https://travis-ci.org/SemanticMediaWiki/SemanticMediaWiki/builds/281859845>



### Unit and Integration Testing

October 2018 –  
SMW 3.0.0

**6,808**

tests

**17,978**

assertions

# Semantic MediaWiki

## Semantic MediaWiki 3.0.0

### New features and enhancements:

- Supports extension registration via `enableSemantics( example.org );`
- Removes “classic” maintenance scripts
- Adds two utility maintenance scripts (remove duplicate entities, update entity collation)
- Adds new script options to “rebuildData.php” maintenance script (e.g. `--force-update`, `--dispose-outdated`, etc.)
- Adds “smw/schema” namespace to create and maintain JSON specific schemata/profiles (keyword formatting, search profile etc.)

### smw/schema:Keyword link formatter rule <sup>?</sup>

Dieser Schematyp definiert, entsprechend der Festlegung mit dem Attribut [Formatierungsregel](#), kontextsensitive Links.

Specifies a formatting rule for a keyword type

Schema

```
{
  "description": "Specifies a formatting rule for a keyword type",
  "type": "LINK_FORMAT_SCHEMA",
  "rule": {
    "link_to": "Special:Ask",
    "parameters": {
      "format": "broadtable",
      "printouts": [
        "Has description"
      ],
      "btitle": "smw-ask-title-keyword-type",
      "bmsg": "smw-ask-message-keyword-type"
    }
  },
  "tags": [
    "formatter",
    "link formatter",
    "keyword"
  ]
}
```

Typ: [LINK\\_FORMAT\\_SCHEMA](#)

Schemakennzeichen: [formatter](#) | [link formatter](#) | [keyword](#)

# Semantic MediaWiki

## Semantic MediaWiki 3.0.0

- Adds support for SMWElasticStore using Elasticsearch as an efficient query engine
- Adds datatype “Keyword” (normalized to lowercase with 255 characters maximum)
- Provides tighter integration (via SMWSearch) with special page “Search” and adds extended search profile (support for user defined forms)
- Removes “Type” namespace
- Many configuration parameters and their settings overhauled and streamlined

### Search

[? Help](#)

? The search input supports the use of the semantic [query syntax](#) to help match results using Semantic MediaWiki. The [input assistant](#) is also enabled to ease the pre-selection of available properties and categories.



Search

[Content pages](#) [Multimedia](#) [Translations](#) [Everything](#) [Advanced](#)

[By Language](#) [Extended](#) ▾

Best match ▾ Books and Journals ▾



Has title ...

Has author ...

TT . MM . JJJJ

Has genre ... ▾

Publisher ... ▾

**Search in namespaces:**

Check:

All

None

Show

# Semantic MediaWiki

## Semantic MediaWiki 3.0.0

- Adds support for “compact links” (base64) to special pages “Ask”, “Browse” and “SearchByProperty”
- Improves property pages (user interface) with boxed pagination, a value search field and tabs for usage, improper annotations, synonyms and subproperties as well as a custom tab. Data rows now highlighted on hovering.
- Improves concept pages similarly
- Improves the factbox appearance

Property:Has date

Usage **2022** Subproperties **1** Improper assignments **6** ... more

previous 20 **20** 50 100 250 500 next 20

Filter ...

Showing 20 pages using this property.

**B**

**Berlin** + 

July 31, 2012 <sup>L</sup> + 

# Semantic MediaWiki

## Semantic MediaWiki 3.0.0

- Overhauls list formats (“list”, “ol”, “ul” and “template”):
  - Now also supporting, “propsep” and “valuesep” parameters
  - Separators now governed by system messages
  - Now supporting, “class” parameter
  - “list”, “ol” and “ul” formats now with HTML class attributes
  - “named args” parameter now called without “?” indicator
  - “userparam” parameters passed to templates now called with “#” indicator
    - <https://bit.ly/SMW-ListChanges>
- Makes “plainlist” format default for queries without printouts
- Adds “templatefile” format for exotic exports into files (defined by templates)

# Semantic MediaWiki

## Semantic MediaWiki 3.0.0

- Adds support for datatable views to result format “table” and “broadtable” using `|class=datatable`
- Adds result export button
- Adds support for query parameter `|+width=...` (similar to `|+align=...`)
- Adds support for marking an inline query as deferred (“last in line”) from regular parsing using query marker `|@deferred`
- Adds support for query marker “control”, `|@control=slider`
- Adds support for marking an inline query as part of an annotation using query marker `|@annotation`

### Books

This table shows the books I have stored here:

Show  entries Search:  Export

title	author	year	ISBN	rating
<a href="#">Das Glasperlenspiel</a>	<a href="#">Hermann Hesse</a>	2015	978-3518463574	1
<a href="#">The Picture of Dorian Gray</a>	<a href="#">Oscar Wilde</a>	2015	978-1783293650	1
<a href="#">Venus in Furs</a>	<a href="#">Leopold von Sacher-Masoch</a>	2008	978-1604501292	3

[... more books](#)

Showing 1 to 3 of 3 entries

Previous  Next

### Books



This table shows the books I have stored here:

Show  entries Search:  Export

title	author	year	ISBN	rating
<a href="#">Das Glasperlenspiel</a>	<a href="#">Hermann Hesse</a>	2015	978-3518463574	1
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[... more books](#)

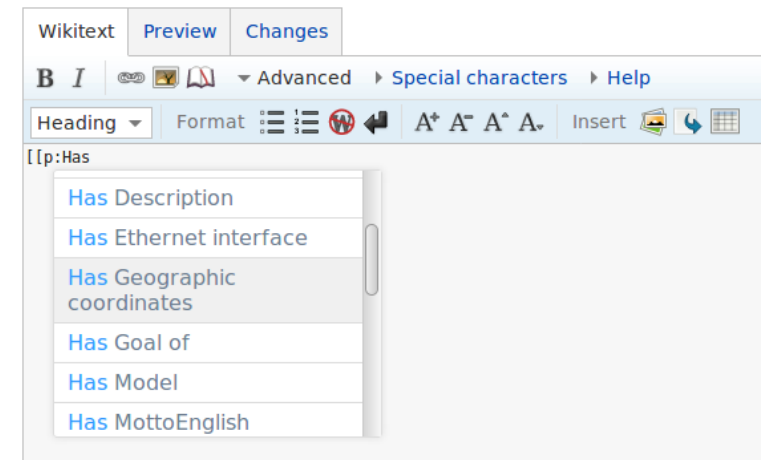
Showing 1 to 3 of 3 entries

Previous  Next

# Semantic MediaWiki

## Semantic MediaWiki 3.0.0

- Adds support for an individual hierarchy depth restriction for an inline query using query parameter `|+depth=...`
- Adds support for input assistance (suggester) using `[[c:`, `[[p:` and `[[con:` which must be enabled by user. Works on text edit field, file upload field and in search field (→ SMWSearch).
- Adds `phrase:` search expression as convenient function where the entire string needs to be matched
- Adds support for `:in` search expression as convenient function (equivalent to `~* . . . *`)



# Semantic MediaWiki

## Semantic MediaWiki 3.0.0

- Brings special page “Ask” completely overhauled including going mobile
- Adds possibility to change the entity collation used for sorting (corresponding to MediaWikis category collation)
- Adds two API modules “smwtask” (internal usage) and “smwbrowse” (eventually replacing “browsebyproperty”)
- Added `api\_version` to “ask” and “askargs” API modules to switch output generation but keep compatibility with previous outputs

### Semantic search

[?](#) Help

[Options](#) | [Search](#)

[Clear all entries](#) | [?](#)

#### Condition

...

#### Printout selection

...

#### Options

Broad table (default) ▼

Parameters [ + ]

source:

▼

Sort options

▼

Ascending ▼

[\[Delete\]](#)

[\[Add sorting condition\]](#)

Find results



# Semantic MediaWiki

## Semantic MediaWiki 3.0.0

- Special page “SemanticMediaWiki” was completely overhauled including going mobile
- Special page “SemanticMediaWiki” informs about configuration parameter changes (removals, different settings)
- Support to restrict/limit `#ask/#show` executions on a per page basis
- Introduces “Authority mode” tied to user group “SMW curator” is to support stricter environments hereby allows to control the property creation process

### Semantic MediaWiki

Overview

Maintenance

Supplementary functions

This special page helps you during installation, upgrade, maintenance and usage of [Semantic MediaWiki](#) and also provides further administrative functions and tasks as well as statistics. Remember to back up valuable data before executing administrative functions.

#### Software environment

```
{
  "SMWElasticStore": {
    "mysql": "10.1.37-MariaDB-0+deb9u1",
    "es": "6.5.0"
  },
  "smw": "3.1.0-alpha",
  "mediawiki": "1.32.0-rc.0",
  "php": "7.0.30-0+deb9u1"
}
```

#### Getting support

Various resources are provided to help you in case of problems:

- If you experience problems with your installation, start by checking the guidelines in the [INSTALL file](#) and the [installation page](#).
- The complete user documentation to Semantic MediaWiki is at [semantic-mediawiki.org](#).
- Bugs can be reported to the [issue tracker](#), the [reporting bugs](#) page provides some guidance on how to write an efficient issue report.
- If you have further questions or suggestions, join the discussion on the Semantic MediaWiki [user mailing list](#) or the [chatroom](#).

#### Announce your wiki

If your wiki is public, you can register it on [WikiApiary](#), the wiki tracking wiki.

Announce your wiki

Many more features and changes

- Release notes at <https://bit.ly/smw-300-rn>
- Migration guide at <https://bit.ly/sme-300-mg>

# Semantic MediaWiki

How can you contribute?!

# Semantic MediaWiki

## How can you contribute?

- Where are many ways to contribute
  - Create a quality feature requests ( → click here)
  - File quality bug reports on issues you encounter ( → click here)
  - Contribute code with tests, tests and tests ( → click here)
  - Become part of the testers group and test ( → click here)

# Semantic MediaWiki

## How can you contribute?

→ Where are many ways to contribute (cont.)

- Add or enhance documentation ( → click here)
- Add or enhance translations ( → click here)
- Answer questions and participate in discussions ( → click here)
- Organize events ( → click here)

Thank you!